FEDERAL TRADE COMMISSION



Uncovering the Malware Economy

Moderator:

Sheryl L. Drexler, Investigator, Division of Marketing Practices, FTC

 What are the financial incentives for malicious spammers? What is the cost along the email chain to consumers, businesses, Internet service providers, and networks?



Uncovering the Malware Economy

- Gregory Crabb, United States Postal Inspector, United States Postal Inspection Service
- Jens W.L. Hinrichsen, Product Marketing Manager, Consumer Solutions, RSA, The Security Division of EMC
- Andrew J. Klein, Senior Product Marketing Manager, SonicWALL, Inc.
- Heinan Landa, President and Founder, Optimal Networks, Inc.



Andrew J. Klein

 Senior Product Marketing Manager, SonicWALL, Inc.

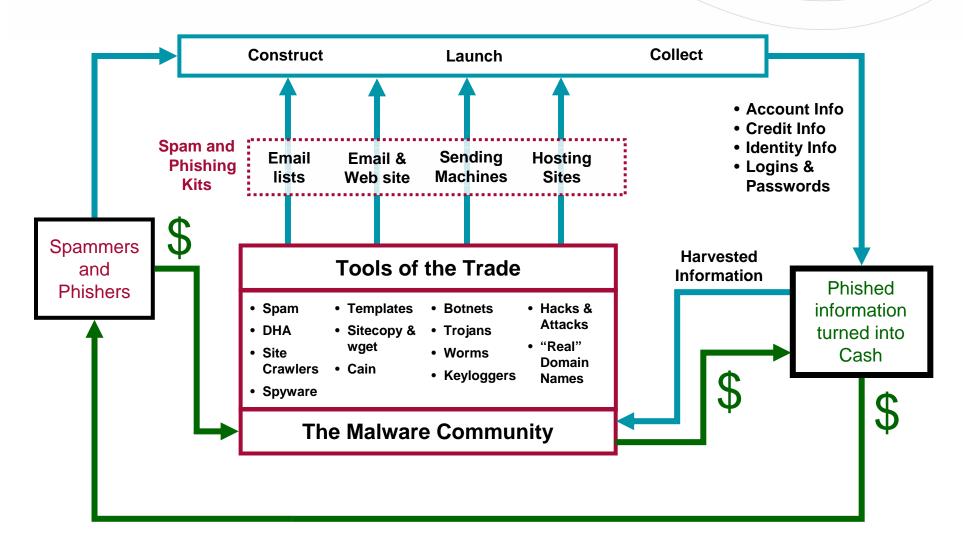


Malware, Mayhem & Money The Rise of the Malware Economy

Andrew Klein
Senior Product Marketing Manager



The Malware Economy





Tools of the Trade - Botnets

A collection of compromised computers that are run under a common control structure

Functions

 Spam, phishing, pharming, distributing adware or malware, DHA, DOS attacks, and temporarily storing illegal, malicious or stolen files.

Create your own

Mr. X (Dutch Spammer) – 600 to 700 machines, 9B spam emails

Rent one out for \$300 to \$700 per hour

- Jeanson James Ancheta (19) \$60,000 in 6 months
- Christopher Maxwell (19) \$100,000 in one year

How many

- 70 Million compromised machines (Trend Micro)
- 100 to 150 Million compromised machines (Vint Cerf)
- Over 10,000 botnets become active each day (Symantec)
- 8 to 9 million compromised machines become active each month (Trend Micro)



Tools of the Trade - Domains

- citibank-validate.info
- earthlink-reactivation.net
- services-bankofamerica.com
- sales-aol.net
- secure-ebay.com
- msn-reactivation.net
- secure-usbank.info
- service-visa.net
- verification-e-gold.com
- rewardprogramsurvey.us
- customer-verification.com
- banking-account-renewal.com

Hall of Fame

Phishers SSL Certificate

>> citibanhk.de <<

Duplicated Registrar Info

>> creditlyonaisse.com <<

Registering a Cyrillic "a"

>> paypal.com <<



Tools of the Trade - Hacks

Hacked bank server hosts phishing sites

Direct

Criminals hack a Chinese bank's server and use it to host phishing sites.

By Jeremy Kirk, IDG News Service, 03/13/06

Criminals appear to have hacked a Chinese bank's server and are v from customers of eBay and a major U.S. bank., according to Inte

It may be the first scheme that uses one bank's infrastructure to exp services developer for Netcraft, based in Bath, England.

A user of Netcraft's free phishing toolbar reported receiving a susp sites located in hidden directories on a serssver with IP addresses to Construction Bank, a state-owned bank with more than 14,000 broaders.

One of the phishing sites offered customers of Chase Bank, part of filling out a survey. The survey asked for the user's ID and passwor requested the person's bank card number, PIN, card verification m Security number, Netcraft

Press Release

Goldleaf Technologies Responds to Phishing Attempt

BRENTWOOD, Tenn., May 27, 2006 (BUSINESS WIRE) -- Goldleaf Technologies, a unit of Goldleaf Financial Solutions, Inc. (NASDAQ:GFSI) and a leading provider of Web-based ACH and check conversion solutions, announced today that it has identified and responded to attempts to redirect users to fraudulent Web sites.

On Thursday, May 25, Goldleaf Technologies' IT staff identified an attempt to redirect its clients' customers to a phishing website to entice them to enter their personal financial information. To ensure the security of the network, the company temporarily suspended all Internet access to Goldleaf Technologies' Web site services.

Florida banks hacked in new spoofing attack

Hackers use legitmate Web sites for phishing attacks on three Florida banks, making it harder for even savvy users to detect the scam.

By Robert McMillan, IDG News Service, 03/30/06

Three Florida banks have had their Web sites compromised by hackers in an attack that security experts are calling the first of its type.

Hosted

Earlier this month, attackers were able to hack servers run by the ISP that hosted the three banks' Web sites. They then redirected traffic from the legitimate Web sites to a bogus server, designed to resemble the banking sites, according to Bob Breeden, special agent supervisor with the Florida Department of Law Enforcement's Computer Crime Center.

Users were then asked to enter credit card numbers, PINs and other types of sensitive information, he said.

nd corrected the problem. We ldition to contacting our nd law enforcement authorities.

Service



Making money with Tools

Spyware kits for sale - £10 or \$17

A Russian website has appeared on the internet selling spyware kits for ten pounds.

The spyware kit, called WebAttacker, is currently available for approximately £10 (\$17). The website, which refers to its creators only as spyware and adware developers, touts the strengths of its software and makes the kits available for purchase online even offering buyers technical support.

Included in the kits are scripts designed to simplify infecting computers. The buyer only needs to send spam to email addresses inviting recipients to visit a compromised website.

China detains 6 over 'panda' virus

BEIJING, China (Reuters) — China has detained six men in their 20s for writing or profiting from a computer virus dubbed the "joss-stick burning panda" which has infected over a million PCs in the country, local media said on Wednesday.

The worm wreaked havoc among individual and corporate users in China in a late 2006 outbreak, deleting files, damaging programs and attacking web portals.

It got its name from changing icons on desktops into cute cartoon pandas, the most famous of which holds three burning joss-sticks in his paws.

Chinese media have said that the worm was able to steal account names of online gamers and instant messengers, which are hotly traded with real money in China's cyberspace.

Police held Li Jun, 25 a native of Wuhan city in central China, who wrote the virus in October and had earned more than 100,000 yuan (\$12,890) by selling it to about 120 people, the Beijing News said.

The other five, from three different provinces, were detained for updating and spreading the virus or for profiting from the stolen account names, the Beijing News said.

"It is the first time our country has cracked a major computer virus case," it added.



Tools 2.0

Quality, quantity of phishing kits on the rise

By Munir Kotadia Mon Oct 16 12:20:10 PDT 2006

The marketplace for phishing toolkits, which can allow technophobe criminals to quickly and easily set up spoofed versions of banking Web sites, is booming, with kits changing hands for as little as \$30.

Although phishing kits are nothing new, in the past year their quantity and quality have increased dramatically, according to Dan Hubbard, vice president of security research for Websense and a representative of the Anti-Phishing Working Group.

Phishing kits "have been around for years, but the volume is one of the big changes," Hubbard said. "The kits available are better designed."

In particular, Hubbard noted that the kits were vaunting their immunity to common defensive techniques. These include detection by signature-based defensive programs, which look for the signature, or the "fingerprint," of known malicious software. Another is heuristics, which use pattern recognition to identify threats.

Phishing Toolkit being Sold Online

Techtree News Staff Jan 15 2007

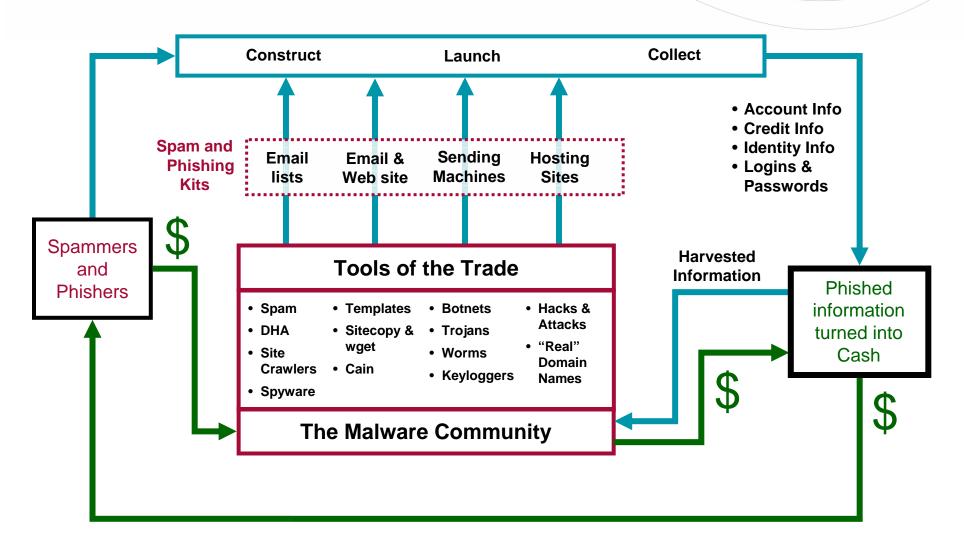
RSA, the security division of EMC, has announced that its Anti-Fraud Command Centre (AFCC) has uncovered a new phishing toolkit being sold and used online by fraudsters.

The company said that this new phishing kit, dubbed as 'Universal Man-in-the-Middle Phishing Kit', is designed to facilitate new and sophisticated attacks against global organizations in which victims communicate with a legitimate Web site via a fraudulent URL set by the fraudster. This allows the fraudster to capture victims' personal information in real-time.

In a statement, Marc Caffan, Executive of RSA, said that what is unique about this kit is that it changes the rules of the game. It offers a much better return on investment, and can be used to mount attacks against multiple targets, such as several banks simultaneously, without any code changes or technical expertise. A hacker could employ it against dozens of targets.



The Malware Economy





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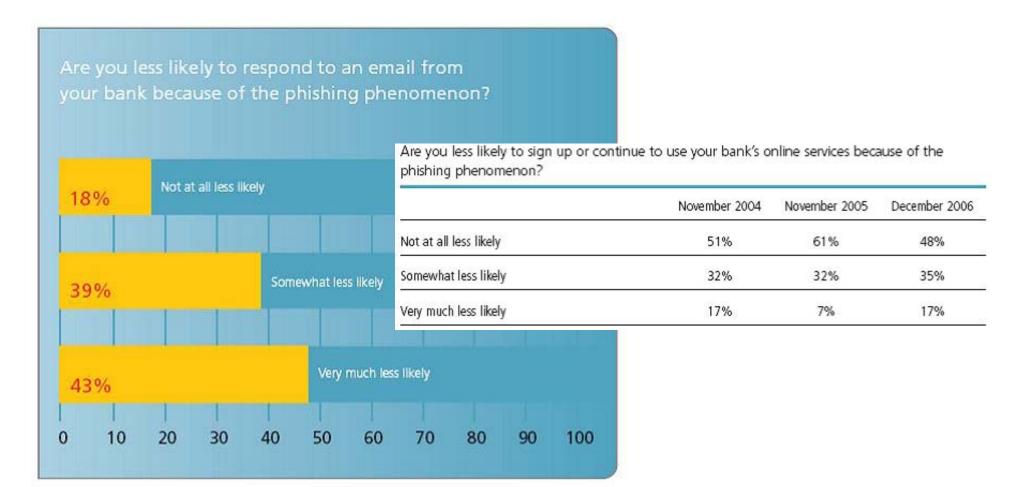
Jens W.L. Hinrichsen

Product Marketing Manager,
 Consumer Solutions, RSA,
 The Security Division of EMC



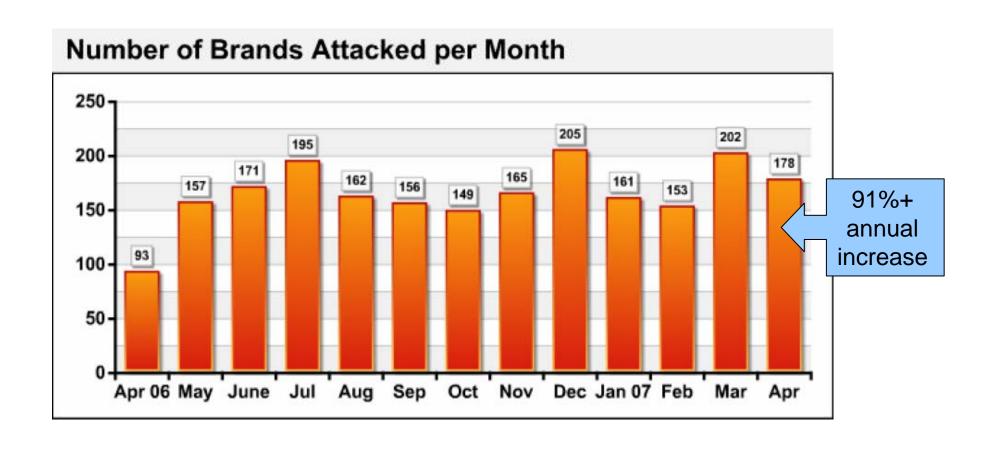


Consumer Confidence Remains Shaky





While Phishing Continues to Grow



Source: RSA Anti-Fraud Command Center repository



Some of the (Unfortunate) Latest Trends

- More institutions than ever being targeted by phishing
 - More FCUs and Regional banks coming under fire
 - More sophisticated attacks
 - Multi-redirectors with SSL certificates
 - Significantly greater use of phishing-based Man-In-The-Middle attacks
 - Tandem phishing and Distributed Denial of Service (DDoS) attacks
 - Spear phishing continue to grow
- »More brazen fraudsters
- While the use of crimeware/Trojans is growing.



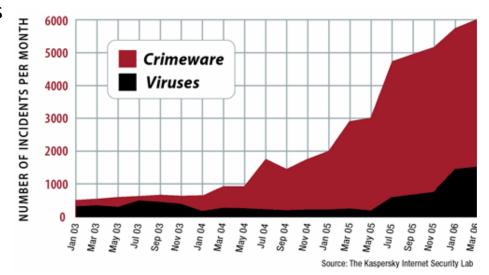
While Crimeware is Taking Off

Some of the control of the contro

- Of the hundreds of thousands of pieces of malicious code in existence worldwide, roughly half of new variants in 2006 were Trojans. . .
- Recent RSA analysis of a single Gozi/BankSniff variant showed 30,000 infected users in a single month

Some of the crimeware families

- Torpig
- Gozi/BankSniff
- Haxdoor
- Trj/Briz.A (made-to-order)
- Metafisher
- Not to mention "Super Trojans". . .





Crimeware and Consumers – Cause for Concern *RSA Consumer Study, 12/06*

"How concerned have you been about other types of attacks, such as trojans and keyloggers over the past six months?"

. . . 44% of respondents already "increasingly concerned"

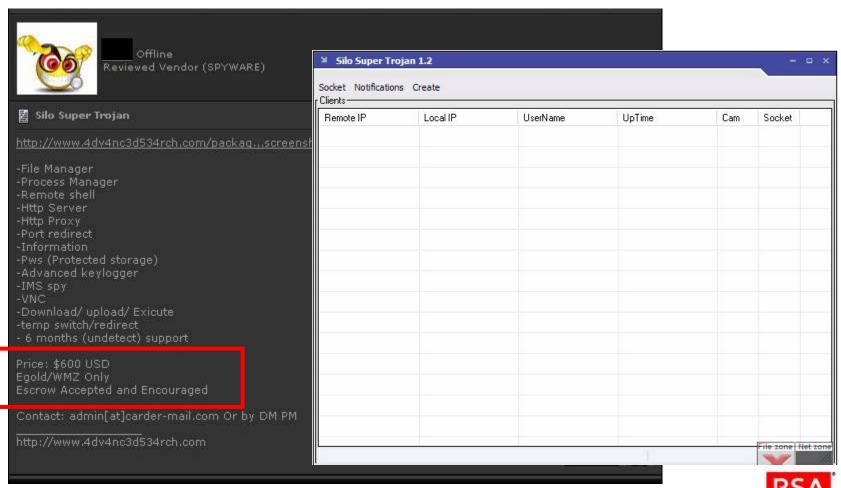
» Expected to increase markedly over coming 6-12 months

According to a recent survey by the National Cybersecurity Alliance, over 90 percent of consumers have some type of spyware on their computers



"Super Trojans"?

The Tools Are Becoming More Capable, Available - And Affordable!





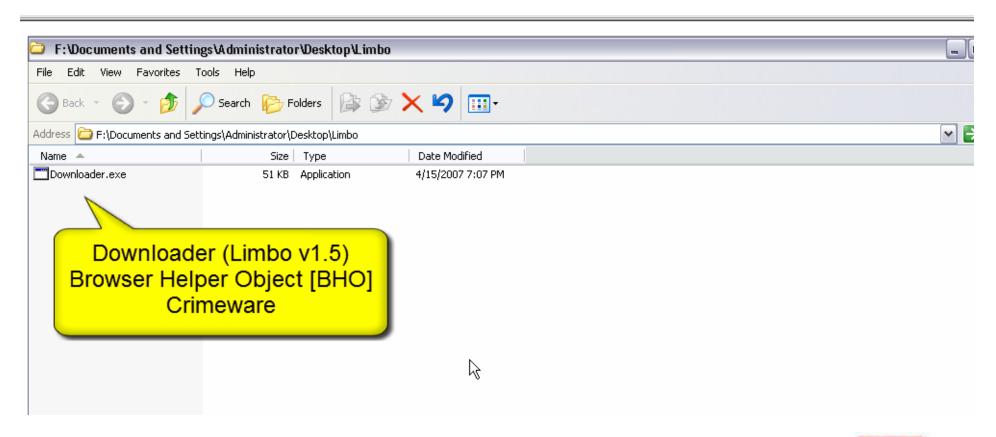
Trojan Promotion in the Underground. . .



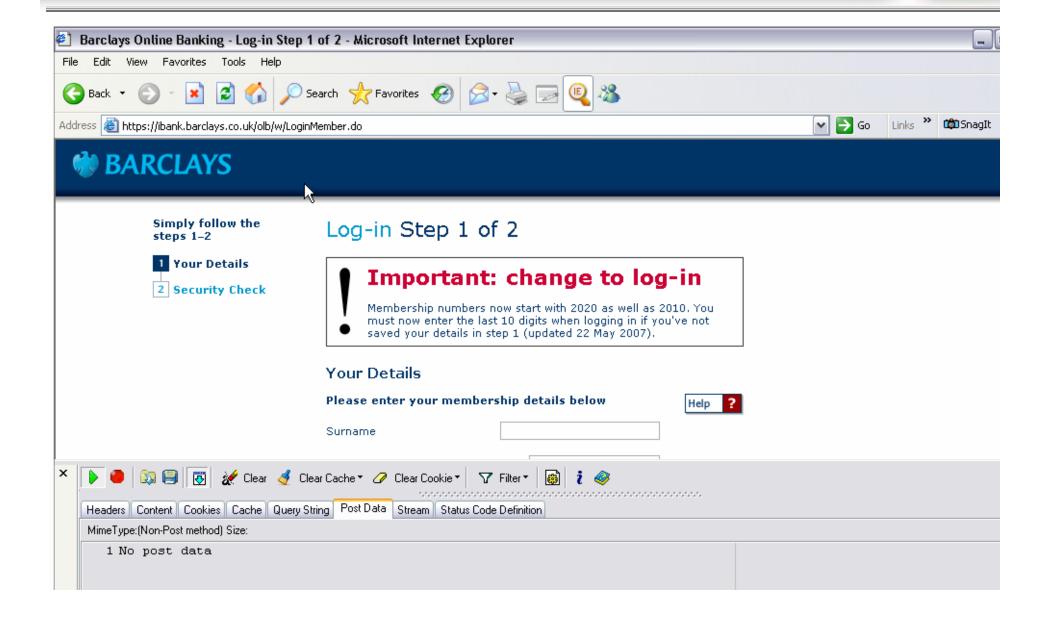
SE-CODE – The E-gold Session-Hijacking Trojan

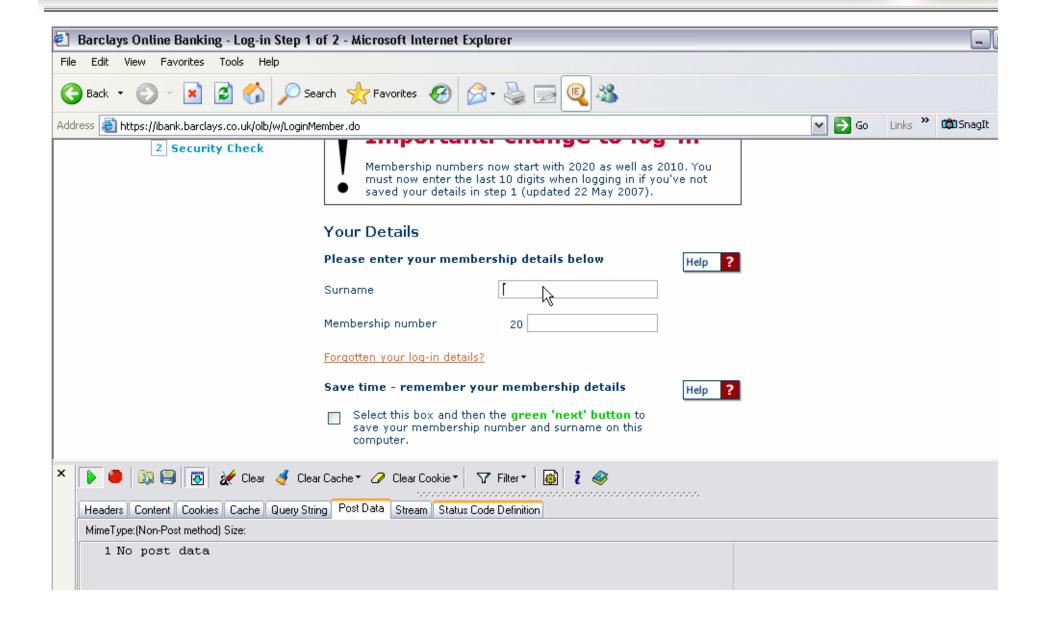


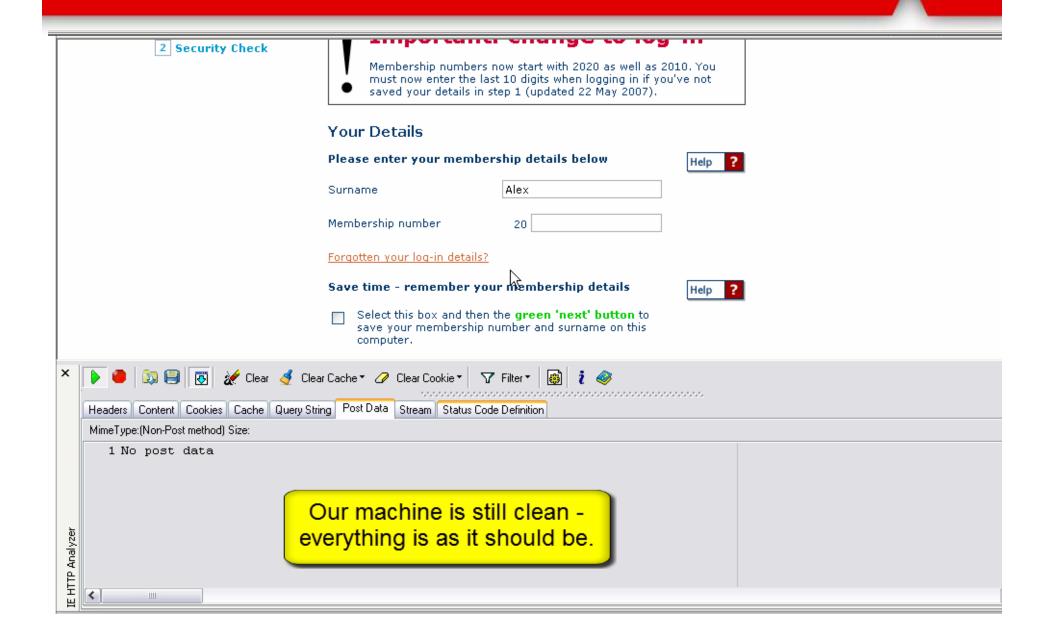
» HTML-injection Trojan, targeting additional credentials

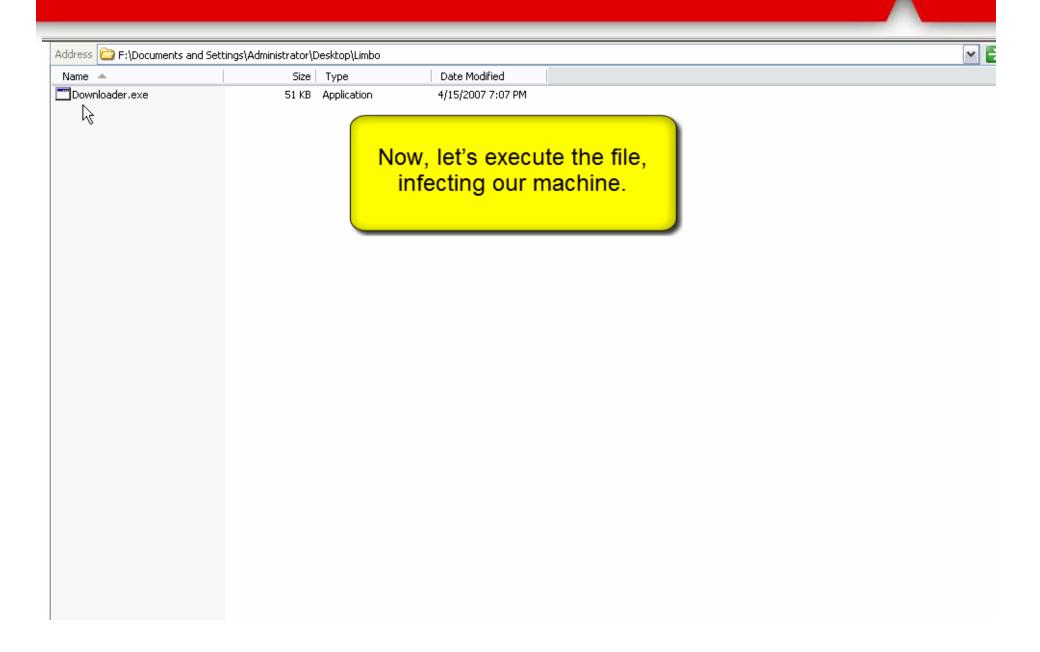


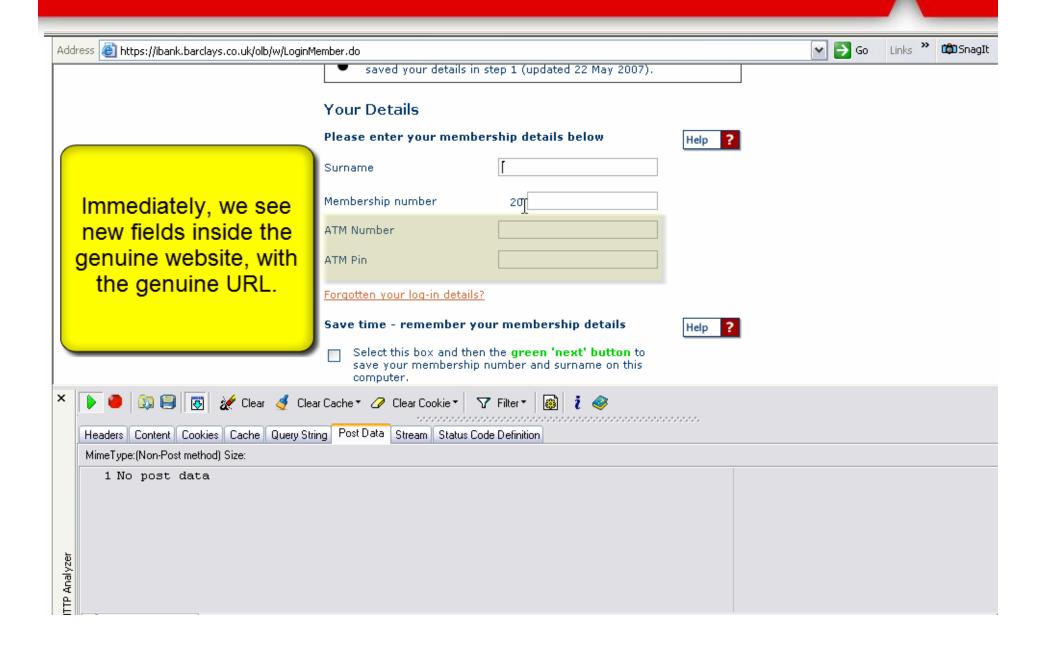


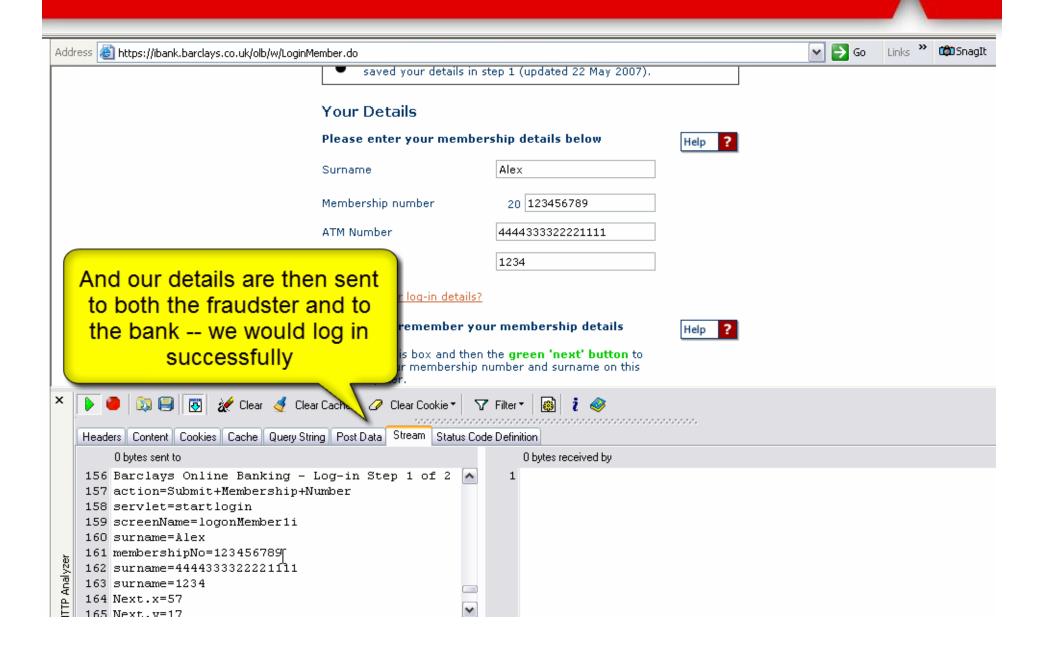


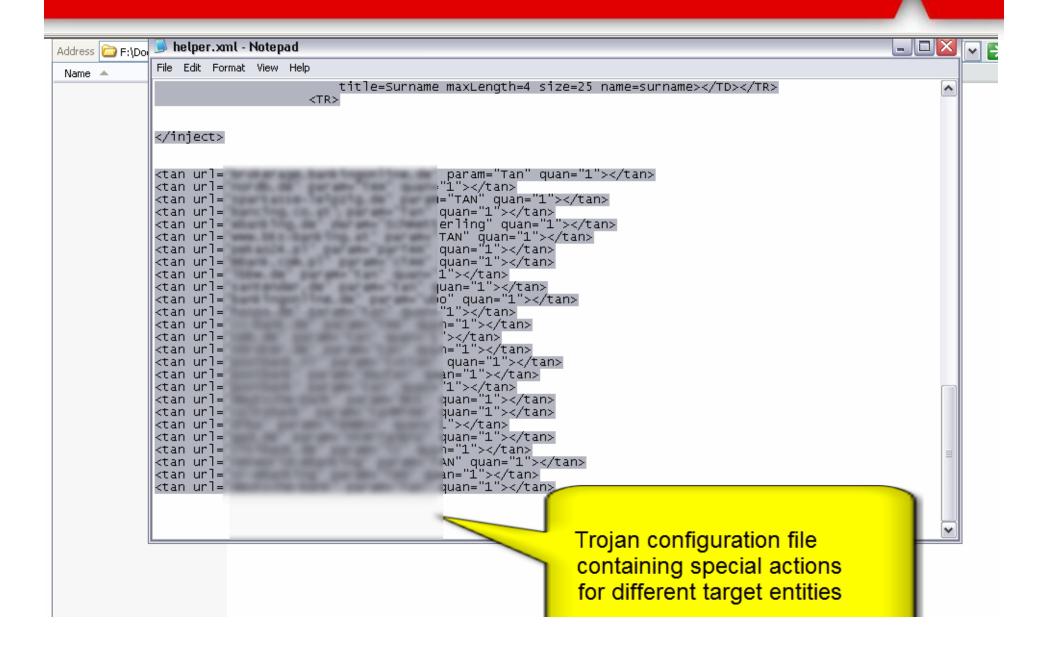






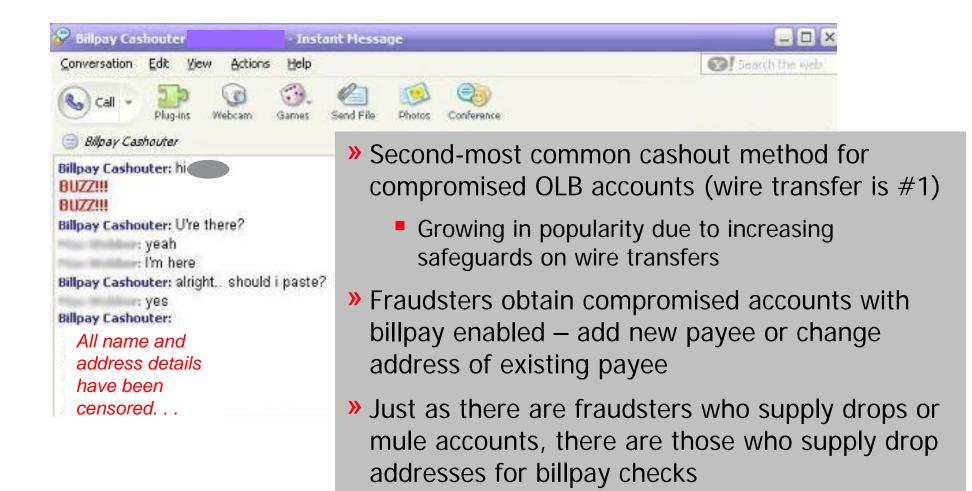






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Billpay's Growing Appeal for Cashout Path of Lesser Resistance





What Should We Do?

- » Proactively detect, analyze, block and shut down phishing and crimeware/Trojan attacks
- » Reduce fraudsters' interest in your customers' credentials:
 - Implement stronger authentication
 - Deploy fraud detection mechanisms on the web and phone channels
 - Establish multiple "integrated layers" of defense
- Tap into a cross-institution, international fraud network that tracks global resources used by fraudsters

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Gregory Crabb

 United States Postal Inspector, United States Postal Inspection Service



Cybercrime FTC SPAM Summit July 11, 2007

Gregory Crabb
Cyber Crime, Program Manager
United States Postal Inspection Service
Global Investigations





Joint

Investigative





























OPERATION GOLD PHISH









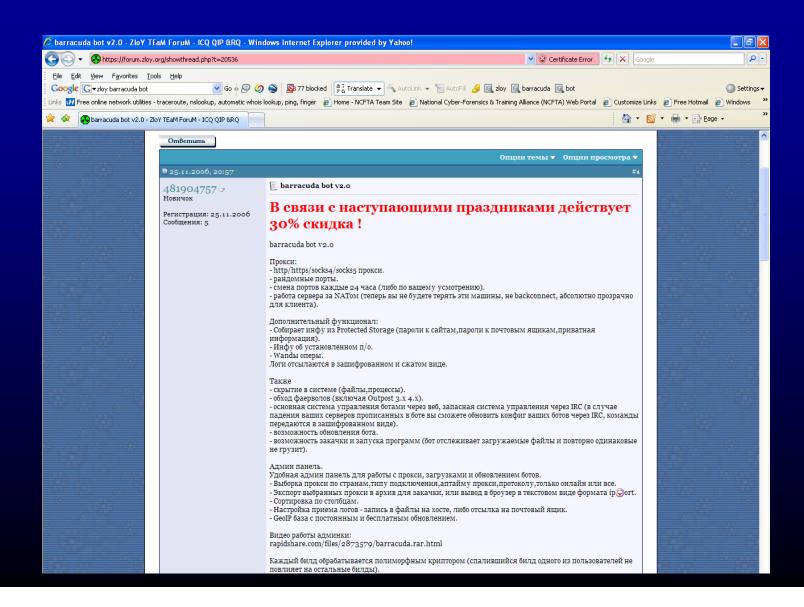




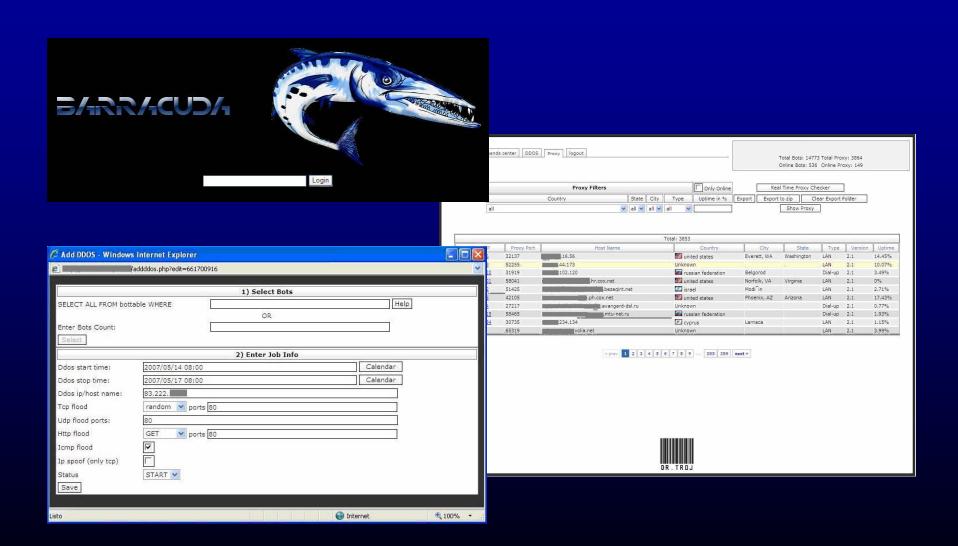
Cultural Learnings of America for Make Benefit Glorious Anarchy of Cyber Crime



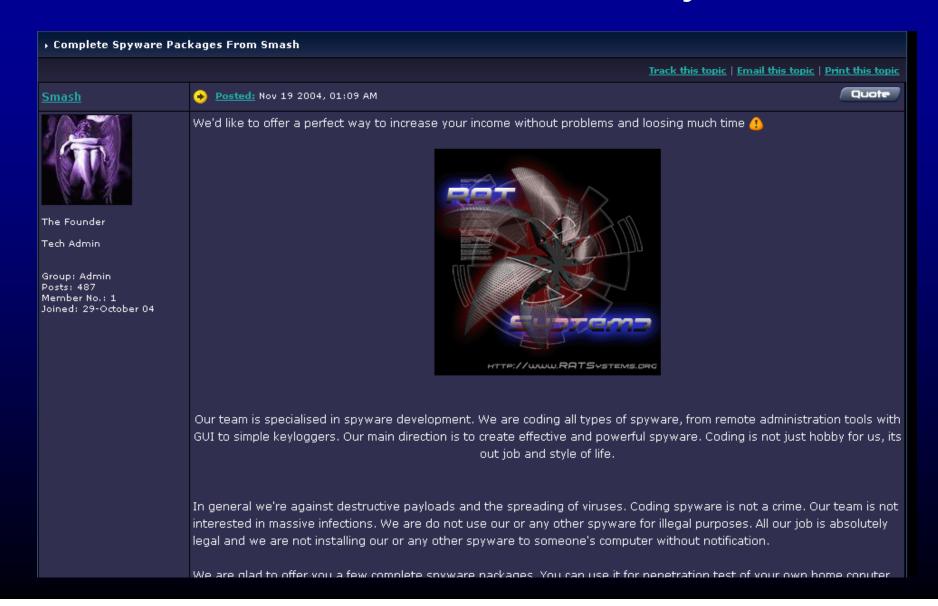
https://forum.zloy.org/showthread.php?t=20536



Your WebMoney Purchase...



Smash And His Trojan



A Motive to use Malware

AL-DAOUR, MUGHAL & TSOULI are charged with:

- · Conspiracy to murder
- Incitement to commit acts of terrorism outside the UK
- Possession of articles for a terrorist purpose
- Conspiracy to defraud









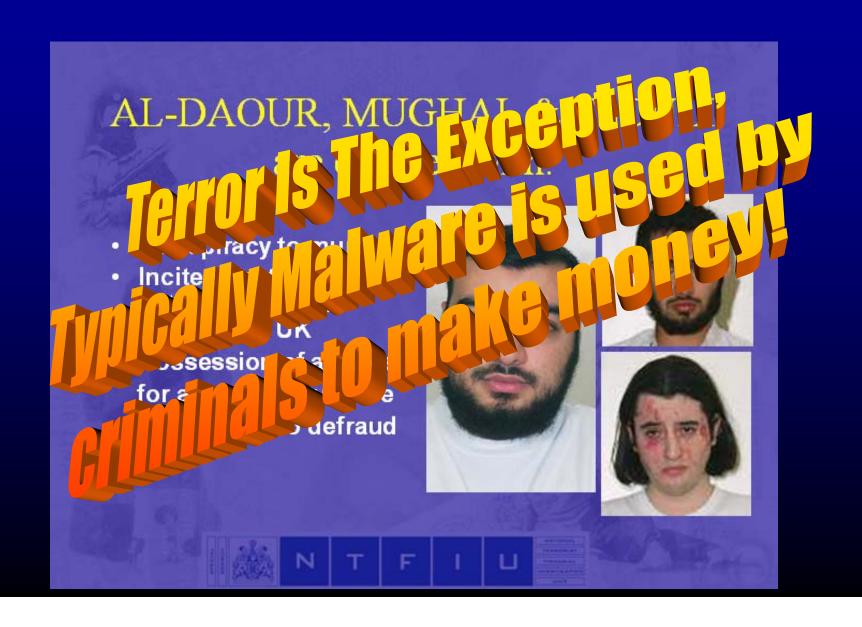








A Motive to use Malware



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Heinan Landa

• President and Founder, *Optimal Networks, Inc.*



BREAK

Afternoon Break: 3:15 PM to 3:30 PM

